April 22, 2003

RE:***UGN, INC 127-16516-00072***
TO: Interested Parties / Applicant
FROM: *Paul Dubenetzky*
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for consideration at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

e make Indiana a cleaner, healthier place to live.

Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015

(317) 232-8603
(800) 451-6027
www.state.in.us/idem

NEW SOURCE CONSTRUCTION PERMIT AND MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

UGN, Inc.
2252 Industrial Drive
Valparaiso, Indiana 46383

(herein known as the Permittee) is hereby authorized to *construct and* operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 127-16516-00072	
Issued by: **Original signed by** Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: **April 22, 2003** Expiration Date: **April 22, 2008**

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary automotive polyurethane foam composite part/plastic headliner manufacturing plant.

Authorized Individual:	Environmental Coordinator
Source Address:	2252 Industrial Drive, Valparaiso, Indiana 46383
Mailing Address:	1001 State Street, Chicago Heights, Illinois 60411
General Source Phone:	708-757-8608
SIC Code:	3714
County Location:	Porter
Source Location Status:	Nonattainment area for Ozone Attainment area for all other criteria pollutants
Source Status:	Minor Source, under PSD and Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) Seven (7) molding cells (identified as Cell # 1 through 7), consisting of forty-four (44) injection mold carriers, with a total production of 12,481 pounds of molded polyurethane foam insulation per hour. The stacks on Cell #3 have an exhaust rate of 8,5000 acfm each. All other stacks have a flow rate of 5,000 acfm. This facility was constructed in 1996.

(b) One (1) headliner adhesive spray line booth (identified as HL-1), using two (2) airless spray guns, capable of spraying both sides of 60 headliners per hour. This facility was constructed in 1997.

(c) One (1) laminator press, which has a capability to handle 1.46 x 2.87 square meters for the largest part. This unit was constructed in 1997.

(d) Three (3) water jet cutters, with a combined capacity of 60 headliners per hour. These units were constructed in 1997.

(e) Two (2) 11,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(f) Two (2) 6,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(g) One (1) cold cleaner tank with a storage capacity of 20 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operation and located in the maintenance department. This unit was installed in January, 1997.

(h) Plant wide use of cleanup solvents and mold release agents delivered from either aerosol cans, manual spray bottles, or air atomization spray guns and use of adhesive, which is brushed on or applied with aerosol spray cans. Also, the use of solvent pumped from one closed container to another to flush adhesive delivery lines.

(i) Eleven (11) roof air-makeup units burning natural gas, with a combined heat input capacity of 26.90 MMBtu/hr. These units were installed in 1997.

(j) Fifteen (15) various natural gas-fired heaters, with a combined heat input capacity of 3.64 MMBtu/hr. These units were installed in 1996.

(k) One (1) mudguard operation (identified as cell #9) using polyester terephthalate (PET) and latex padding with a maximum process rate of 360 pounds per hour. This facility will be constructed in 2003.

(l) One (1) headliner adhesive spray booth line (identified as HL-2), using two (2) airless spray gun robotic stations, capable of spraying 120 headliners per hour, using seventy-five (75) pounds of adhesive per hour and controlled by dry filters. This facility will be constructed in 2003.

(m) Two (2) cold tank cleaners with a combined storage capacity of 115 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operations. These units will be constructed in 2003.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled “Minor Source Operating Permit”, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.

(1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.

(2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6, 326 IAC 2-2 and 326 IAC 2-3 and an Operation Permit Validation Letter is issued.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 NSPS Reporting Requirement

Pursuant to the New Source Performance Standards (NSPS), Part 60.110Kb, Subpart Kb, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

(a) Commencement of construction date (no later than 30 days after such date);

(b) Actual start-up date (within 15 days after such date); and

(c) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

Reports are to be sent to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, IN 46206-6015

The application and enforcement of these standards have been delegated to the IDEM, OAQ. The requirements of 40 CFR Part 60 are also federally enforceable.

B.9 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.

(c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality
Indiana Department of Environmental Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.10 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner makes a reasonable time.

B.11 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

(a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.12 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.13 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.14 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an “authorized individual” as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The

requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.10 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.11 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.12 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.13 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this permit, any reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(a) Seven (7) molding cells (identified as Cell # 1 through 7), consisting of forty-four (44) injection mold carriers, with a total production of 12,481 pounds of molded polyurethane foam insulation per hour. The stacks on Cell #3 have an exhaust rate of 8,5000 acfm each. All other stacks have a flow rate of 5,000 acfm. This facility was constructed in 1996.

(b) One (1) headliner adhesive spray line booth (identified as HL-1), using two (2) airless spray guns, capable of spraying both sides of 60 headliners per hour. This facility was constructed in 1997.

(c) One (1) laminator press, which has a capability to handle 1.46 x 2.87 square meters for the largest part. This unit was constructed in 1997.

(d) Three (3) water jet cutters, with a combined capacity of 60 headliners per hour. These units were constructed in 1997.

(e) Two (2) 11,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(f) Two (2) 6,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(g) One (1) cold cleaner tank with a storage capacity of 20 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operation and located in the maintenance department. This unit was installed in January, 1997.

(h) Plant wide use of cleanup solvents and mold release agents delivered from either aerosol cans, manual spray bottles, or air atomization spray guns and use of adhesive, which is brushed on or applied with aerosol spray cans. Also, the use of solvent pumped from one closed container to another to flush adhesive delivery lines.

(k) One (1) mudguard operation (identified as cell #9) using polyester terephthalate (PET) and latex padding with a maximum process rate of 360 pounds per hour. This facility will be constructed in 2003.

(l) One (1) headliner adhesive spray booth line (identified as HL-2), using two (2) airless spray gun robotic stations, capable of spraying 120 headliners per hour, using seventy-five (75) pounds of adhesive per hour and controlled by dry filters. This facility will be constructed in 2003.

(m) Two (2) cold tank cleaners with a combined storage capacity of 115 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operations. These units will be constructed in 2003.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Emission Offset [326 IAC 2-3]

This source is not subject to the requirements of 326 IAC 2-3 (Emission Offset) because the potential to emit VOC from the entire source is less than twenty-five (25) tons per year. Any

change or modification which would increase the potential emissions to equal to or greater than twenty-five (25) tons per year of VOC must receive prior approval from IDEM, OAQ.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.1.3 Volatile Organic Compounds (VOC) [326 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius ($38^{O}C$) (one hundred degrees Fahrenheit ($100^{O}F$)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.1.4 Particulate Matter (PM) [326 IAC 6-3-2(d)]

(a) Particulate from the two (2) headliner spray booth lines (HL-1 and HL-2) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Pursuant to 6-3-2(d), the dry filters shall be in operation at all times the two (2) headliner spray booth lines are in operation, in order to comply with this limit.

D.1.5 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and control devices.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.6 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the headlines spray booth stacks (HL-1 and HL-2) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

(b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation and Implementation shall be considered a violation of this permit.

(c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.1.7 Volatile Organic Compounds (VOC) [326 IAC 8-9-1]

Pursuant to 326 IAC 8-9-1 (Volatile Organic Liquid Storage Vessels), the source owner and operator shall maintain a record and submit to the department a report containing the following information for the two (2) six thousand (6,000) gallon storage tanks:

(1) The vessel identification;

(2) The vessel dimensions; and

(3) The vessel capacity.

D.1.8 Volatile Organic Compound Storage Vessels [40 CFR 60, Subpart Kb]

Pursuant to 40 CFR 60, Subpart Kb (326 IAC 12), the Permittee shall maintain records of the dimensions and an analysis showing the capacity of the two (2) 11,000 gallon storage tanks. These records shall be maintained for the life of the source.

D.1.9 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (2) below. Records maintained for (1) and (2) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits established in Condition D.1.1.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) The cleanup and degreasing solvent usage for each month;

(b) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(i) Eleven (11) roof air-makeup units burning natural gas, with a combined heat input capacity of 26.90 MMBtu/hr. These units were installed in 1997.

(j) Fifteen (15) various natural gas-fired heaters, with a combined heat input capacity of 3.64 MMBtu/hr. These units were installed in 1996.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

There are no specific State and Federal rules applicable to these emission units.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	**UGN, Inc.**
Address:	**2252 Industrial Drive**
City:	**Valparaiso, IN 46383**
Phone #:	**708-757-8608**
MSOP #:	**127-16516-00072**

I hereby certify that UGN, Inc. is **9** still in operation.
9 no longer in operation.

I hereby certify that UGN, Inc. is **9** in compliance with the requirements of MSOP 127-16516-00072.
9 not in compliance with the requirements of MSOP 127-16516-00072.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

April 22, 2003

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	UGN, Inc.
Source Location:	2252 Industrial Drive, Valparaiso, Indiana 46383
County:	Porter
SIC Code:	3714
Operation Permit No.:	127-16516-00072
Permit Reviewer:	ERG/SD

On March 17, 2003, the Office of Air Quality (OAQ) had a notice published in the Vidette Times, Munster, Indiana, stating that UGN, Inc. had applied for a New Source Construction and Minor Source Operating Permit (MSOP) to operate a automotive polyurethane foam composite part/plastic headliner manufacturing plant with control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 9, 2003, UGN, Inc. submitted comments on the proposed MSOP. The summary of the comments and responses are shown below.

Comment 1:

The source requested Condition A.2(h) also include the following: "...use of adhesive, which is brushed on or applied with aerosol spray cans...". The source also requested the maximum throughput of the headliner spray facility in Condition A.2(l) be changed from seventy-five (75) gallons of adhesive per hour to seventy-five pounds of adhesive per hour.

Response to Comment 1:

Condition A.2 (h) has been changed as requested by the source. Since the maximum throughput rate of the headliner spray facility was incorrectly stated in the permit, condition A.2(l) has been changed as requested by the source. This did not alter the potential to emit calculation for the entire source since the correct maximum throughput unit was used. The facility description (h) and (l) included in Section D.1 have been corrected so that they agree with the description shown below:

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates stationary automotive polyurethane foam composite part/plastic headliner manufacturing plant.

(h) Plant wide use of cleanup solvents and mold release agents delivered from either aerosol cans, manual spray bottles, or air atomization spray guns **and use of adhesive, which is brushed on or applied with aerosol spray cans.** Also, the use of solvent pumped from one closed container to another to flush adhesive delivery lines.

(l) One (1) headliner adhesive spray booth line (identified as HL-2), using two (2) airless spray gun robotic stations, capable of spraying 120 headliners per hour, using seventy-five (75) ~~gallons~~ **pounds** of adhesive per hour and controlled by dry filters. This facility will be constructed in 2003.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

...

(h) Plant wide use of cleanup solvents and mold release agents delivered from either aerosol cans, manual spray bottles, or air atomization spray guns~~.~~ **and use of adhesive, which is brushed on or applied with aerosol spray cans.** Also, the use of solvent pumped from one closed container to another to flush adhesive delivery lines.

(k) One (1) mudguard operation (identified as cell #9) using polyester terephthalate (PET) and latex padding with a maximum process rate of 360 pounds per hour. This facility will be constructed in 2003.

(l) One (1) headliner adhesive spray booth line (identified as HL-2), using two (2) airless spray gun robotic stations, capable of spraying 120 headliners per hour, using seventy-five (75) ~~gallons~~ **pounds** of adhesive per hour and controlled by dry filters. This facility will be constructed in 2003.

...

Comment 2:

The source requested the transfer efficiency used to calculate the PM/PM10 emissions be changed such that material applied with airless technology spray cans has a transfer efficiency of 75 percent and material applied with an air atomization spray gun has a transfer efficiency of 50 percent.

Response to Comment 2:

The potential to emit of PM/PM10 was calculated assuming a 40 percent transfer efficiency for materials applied using airless technology spray cans and atomization guns (see VOC and PM emissions from Miscellaneous Products, Appendix A, page 9 of 13). This results in 57.6 tons of PM/PM10 potential emissions per year from the entire source. The source requested the transfer efficiency of material applied with airless technology spray cans be changed from 40 percent to 75 percent while the transfer efficiency of material applied with air atomization spray guns be changed from 40 percent to 50 percent. This change would result in 54 tons of PM/PM10 potential emissions per year from the entire source. However, the increases in the transfer efficiencies proposed by the source does not change the type of operating permit required by 326 IAC 2.

No changes have been made to the TSD because the OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur

after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

April 22, 2003

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	UGN, Inc.
Source Location:	2252 Industrial Drive, Valparaiso, Indiana 46383
County:	Porter
SIC Code:	3714
Operation Permit No.:	127-16516-00072
Permit Reviewer:	ERG/SD

The Office of Air Quality (OAQ) has reviewed an application from UGN, Inc. relating to the construction and operation of automotive polyurethane foam composite part/plastic headliner manufacturing plant.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

(a) Seven (7) molding cells (identified as Cell # 1 through 7), consisting of forty-four (44) injection mold carriers, with a total production of 12,481 pounds of molded polyurethane foam insulation per hour. The stacks on Cell #3 have an exhaust rate of 8,5000 acfm each. All other stacks have a flow rate of 5,000 acfm. This facility was constructed in 1996. *

*The total production has increased to 12,481 pounds of molded polyurethane foam insulation per hour from a maximum throughput rate of 9,601 pounds per hour.

(b) One (1) headliner adhesive spray line booth (identified as HL-1), using two (2) airless spray guns, capable of spraying both sides of 60 headliners per hour. This facility was constructed in 1997.

(c) One (1) laminator press, which has a capability to handle 1.46 x 2.87 square meters for the largest part. This unit was constructed in 1997.

(d) One (1) water jet cutter, with a combined capacity of 60 headliners per hour. These units were constructed in 1997.**

** The source has a total of three (3) water jet cutters.

(e) Two (2) 11,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(f) Two (2) 6,000 gallon bulk organic chemical storage tanks. These units were constructed in 1997.

(g) One (1) cold cleaner tank with a storage capacity of 20 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operation and located in the maintenance department. This unit was installed in January, 1997.

(h) Plant wide use of cleanup solvents and mold release agents delivered from either aerosol cans, manual spray bottles, or air atomization spray guns. Also, the use of solvent pumped from one closed container to another to flush adhesive delivery lines.

(i) Eleven (11) roof air-makeup units burning natural gas, with a combined heat input capacity of 26.90 MMBtu/hr. These units were installed in 1997.

(j) Fifteen (15) various natural gas-fired heaters, with a combined heat input capacity of 3.64 MMBtu/hr. These units were installed in 1996.

(k) Barrier Reclaim unit, consisting of two (2) grinders, two (2) cyclones, two (2) fans and one (1) static separator, having a maximum capacity of 550 pounds of scrap material input per hour with no emission control equipment. NOTE: This process has been discontinued.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

The source plans to construct the following emission units and pollution control devices:

(a) One (1) mudguard operation (identified as cell #9) using polyester terephthalate (PET) and latex padding with a maximum process rate of 360 pounds per hour. This facility will be constructed in 2003.

(b) One (1) headliner adhesive spray line booth (identified as HL-2), using two (2) airless spray gun robotic stations, capable of spraying 120 headliners per hour, using seventy five (75) gallons of adhesive per hour and controlled by dry filters. This facility will be constructed in 2003.

(c) Two (2) cold tank cleaners with a combined storage capacity of 115 gallons and maximum solvent consumption of one (1) gallon per day, used for degreasing operations. These units will be constructed in 2003.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(1) CP 127-6314, issued on September 5, 1996.
(2) CP127-7370, issued on January 24, 1997.
(3) CP127- 8156 issued on February 26, 1997.
(4) CP127- 8724, issued on August 25, 1997.
(5) 127-9327, issued on May 8, 1998.
(6) 127-11623-00072, issued on January 12, 2002.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
Mold Cell #7 (Two (2) stacks)	Mold Cell #7	33	Two (2) stacks of 0.5 feet each	5,000 each	Room Temperature

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 02, 2002, with additional information received on January 17, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (Appendix A, ie. pages 1 through 13).

Potential To Emit of Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential To Emit (tons/year)
PM	57.6
PM-10	57.6
SO_2	0.08
VOC	8.41
CO	11.2
NO_x	13.4

HAP's	Potential To Emit (tons/year)
Single HAP	<10
Combined HAP	<25
TOTAL	Negligible

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM_{10} is greater than 25 tons per year, therefore, the source is subject to the provisions of 326 IAC 2-6.1. An MSOP will be issued.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year, therefore, the source is not subject to the provisions of 326 IAC 2-7.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM-10	Attainment
SO_2	Unclassifiable
NO_2	Attainment
Ozone	Severe Nonattainment
CO	Attainment
Lead	Attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

(b) Porter County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	34.1
PM10	34.1
SO_2	0.08
VOC	6.90
CO	11.2
NO_x	13.4

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.

(b) This existing source is not a major stationary source because no nonattainment regulated pollutant is emitted at a rate of 25 tons per year, and it is not in one of the 28 listed source categories.

Pollutant	PM (ton/yr)	PM10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Existing Units	34.1	34.1	0.08	6.91	11.2	13.4
Proposed Modification	23.5	23.5	0.0	1.30	0.0	0.0
Total	57.64	57.64	0.08	8.23	11.24	13.4
PSD or Offset Threshold Level	<250	<250	<250	<25	<250	<250

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit CP-127-16516-00072, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) each criteria pollutant is less than 100 tons per year,

(b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and

(c) any combination of HAPs is less than 25 tons/year.

This status is based on all the air approvals issued to the source and on the calculations shown in Appendix A.

Federal Rule Applicability

(a) The two (2) existing 6,000 gallon bulk organic storage tanks are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because their capacities are less than 40 cubic meters (10,567 gallons).

(b) The two (2) existing 11,000 gallon bulk organic storage tanks are subject to the requirement of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.110b, Subpart Kb) because their capacities are greater than 40 cubic meters (10,567 gallons). Since the storage capacities are less than 75 cubic meters (19,813 gallons), the source is subject to only the recordkeeping requirements of 40 CFR 10.116b, which requires the source to keep readily accessible records showing the dimension of the storage vessels and an analysis showing their capacity. These records should be maintained for the life of the source. The storage tank is exempt from the General Provisions of 40 CFR 60, Subpart A by 40 CFR 110b(b).

There are no other New Source Performance Standards (326 IAC 12) and 40 CFR part 60 applicable to this facility.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

The degreasing operations are not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning (326 IAC 14)), because only non-halogenated solvents are used for this operation.

State Rule Applicability - Entire Source

326 IAC 2-3 (Emission Offset)

Although it is located in Porter County, this source is not subject to 326 IAC 2-3 (Emission Offset) because the potential to emit is less than twenty-five (25) tons per year. This source must obtain approval from IDEM, OAQ before undertaking any change or modification that would increase the potential to emit VOC to greater than 25 tons per year.

326 IAC 2-6 (Emission Reporting)

This source is located in Porter County and the potential to emit VOC is less than ten (10) tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAPs))

The source was constructed prior to July 27, 1997. Therefore, it was not subject to 326 IAC 2-4.1. The construction of a new headliner adhesive spray booth line (identified as HL-2) will emit less than ten (10) tons per year of a single HAP or twenty-five (25) tons per year of any combination of HAPs. Therefore, the source is not subject to the provisions of 326 IAC 2-4.1.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Headliner Spray Booth Lines

326 IAC 8-1-6 (New Facilities - General Reduction Requirement)

Although constructed after January 1, 1980, the two (2) headliner adhesive spray booth lines (HL-1 and HL-2) do not have potential VOC emissions equal to or greater than twenty five (25) tons per year, therefore these facilities are not subject to the provisions of 326 IAC 8-1-6.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

(a) Particulate from the two (2) headliner spray booth lines (HL-1 and HL-2) shall be controlled by a dry particulate filter, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

Pursuant to 326 IAC 6-3-2(d), the dry filters shall be in operation at all times the two (2) headliner spray booth lines are in operation, in order to comply with this limit.

326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark and Floyd Counties)

The two (2) headliner adhesive spray booth lines (HL-1 and HL-2) located in Porter County are not subject to this rule because the total potential to emit VOC from the two lines is less than ten (10) tons per year and the potential to emit VOC from the entire source is less than twenty-five (25) tons per year.

State Rule Applicability - Volatile Organic Storage Vessels

326 IAC 8-9 (Volatile Organic Storage Vessels)

The two (2) six-thousand (6,000) gallon volatile storage tanks are subject to 326 IAC 8-9 (Volatile Organic Storage Vessels) because they are located in Porter county. Since the storage capacity is less than 39,000 gallons, the source is subject only to the recordkeeping and reporting requirement in 326 IAC 8-9-6(b). The owner or operator shall maintain a record and submit to the department a report containing the following information:

(1) The vessel identification;

(2) The vessel dimensions; and

(3) The vessel capacity.

The two (2) eleven-thousand (11,000) bulk organic storage tanks are not subject to 326 IAC 8-9 because they are subject to 40 CFR 60, Subpart Kb, New Source Performance Standards for VOL storage. Being subject to this NSPS exempts these tanks from the requirements of this rule (See 326 IAC 8-9-2 (8)).

State Rule Applicability - Cold Cleaner Operation

326 IAC 8-3 (Organic Solvent Degreasing Operation)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2(Cold Cleaner Operations) and 326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control) because the degreaser was constructed after July 1, 1990 and does not have a remote reservoir.

State Rule Applicability - Space Heaters and Roof Air Make-up Units

There are no specific State or Federal rules applicable to these emission units.

Conclusion

The construction and operation of this automotive polyurethane foam composite part/plastic headliner manufacturing plant shall be subject to the conditions of the attached New Source Construction and Minor Source Operating Permit 127-16516-00072.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Eleven (11) Roof Air-Makeup Units

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
26.9	(11 units total)	235.7

	Pollutant					
	PM*	PM_{10}*	SO_2	NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.90	0.90	0.07	11.78	0.65	9.90

*PM and PM10 emission factors are filterable and condensible PM and PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Eleven (11) Roof Air-Makeup Units

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.475E-04	1.414E-04	8.838E-03	2.121E-01	4.007E-04

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	5.892E-05	1.296E-04	1.650E-04	4.478E-05	2.475E-04

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Space Heaters, Water Heaters and Pressure Washer Evaporation Units

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

Heat Input Capacity MMBtu/hr		Potential Throughput MMCF/yr
3.64	(15 units total)	31.9

	Pollutant					
	PM*	PM_{10}*	SO_2	NO_x	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.12	0.12	0.01	1.60	0.09	1.34

*PM and PM10 emission factors are filterable and condensible PM and PM10 combined.
**Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Methodology

All Emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF - 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR<100
Space Heaters, Water Heaters and Pressure Washer Evaporation Units

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

HAPs - Organics

	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	3.350E-05	1.914E-05	1.196E-03	2.871E-02	5.424E-05

HAPs - Metals

	Lead	Cadmuim	Chromium	Manganese	Nickel
Emission Factor in lb/MMCF	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	7.976E-06	1.755E-05	2.233E-05	6.062E-06	3.350E-05

Methodology is the same as previous page.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations

Company Name: UGN, Inc.
Address City IN Zip:
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

	Maximum Throughput Rate (tons/hr)	*Emission Factor (lbs/ton)	PTE Before Controls (tons/yr)	Control Efficiency	PTE After Controls (tons/yr)
PM	0.18	2.62	2.1	0.0	2.1
PM_{10}	0.18	2.62	2.1	0.0	2.1

* There are no emission factors for this process in AP-42. Th emission factors used here were obatined from a stack test conducted at a similar facility in New Jersey on January 3, 2002.
** Assume all PM emissions are PM_{10}.

Methodology

Potential to Emit PM/PM10 (tons/year) = Maximum Rate (tons/hour) * Emission Factor (lbs/hour) * 1 ton/2000 lbs * 8760 hours/year

Appendix A: Emission Calculations
VOC Emissions from Mud Guard- (Cell 9)

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

Material	Maximum Throughput Rate (tons/hr)	Emission *Factor (lbs/ton)	PTE Before Controls (tons/yr)
PET and Latex Material	0.18	0.24	0.19

State Potential Emissions **0.19**

* There are no emission factors for this process in AP-42. The emission factors used here were obatined from a stack test conducted at a similar facility in New Jersey on January 3, 2002.

Methodology

Potential to Emit VOC (tons/year) = Maximum Rate (lbs/hour) * 1ton/2000 lbs * 8760 hours/year

Appendix A: Emission Calculations
MDI Emissions from Headliner Spray Booths (HL-1 and HL-2)

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

MDI EMISSIONS CALCULATION

	HL-1	HL-2
Largest part area to be sprayed (m^2)	4.19	4.19
Rate of adhesive application (grams/m^2)	60	60
Maximum production rate (parts/hr)	60	120
"Tack free" temperature (Kelvin)	343	343
"Tack free (u) across coated surfaces (m/sec)	3.0	3.0

Evaporation Rate (gm/sec):		The vapor pressure in atmosphere:		Average mol wt.		Exposed area (m^2)	
W	0.00048	**P_T**	1.32E-06	**M_T**	250	**A**	8.38
		VP mmHg	1E-03				
		Hg pressure (mm)	760				

	HL-1	HL-2
***VOC EMISSIONS (grams/part)**	0.029	0.029
VOC EMISSIONS (TPY)	0.017	0.033
MDI	45%	45%
PMDI	55%	55%
****MDI EMISSIONS (TPY)**	0.0075	0.015

*VOC emission is both for MDI and PMDI
** MDI emissions are based on 60 parts per hour for HL-1 and 120 parts per hour for HL-2

Methodology

MDI emissions calculation based on an equation from the society of plastic industry

Evaporation Rate (gm/sec) W = (25.4 x P_T x M_T x u^0.78 x A)/T in kelvin

Vapor Pressure in atmosphere P_T = (VP mmHg/Barometric Pressure)

The adhesive is applied to both sides of the largest part area A = 2 x largest part area to be sprayed (m^2)

VOC emissions (grams/part) = W (gms/sec) x 60 sec/min x 1 min/part
VOC emissions (tons per year) = VOC (gm/part) x number of parts/hr x 1 lb/454 gm x 8760 hrs/yr x 1 ton/2000 lbs.
MDI emissions = VOC emissions (gm/part) x MDI % x number of parts/hr x 1 lb/454 gm x 8760 hrs/yr x 1 ton/2000 lbs

Appendix A: Emissions Calculations
VOC from Headliner Spray Booth HL-1 and HL-2

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

VOC POTENTIAL TO EMIT BEFORE CONTROLS

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons/yr
Peelable Wall Coating in HL-1	9.1	59.4%	57.4%	2.0%	63.5%	34.40%	0.0009	60.0	0.50	0.18	0.01	0.24	0.04
Peelable Wall Coating in HL-2	9.1	59.4%	57.4%	2.0%	63.5%	34.40%	0.0009	120.0	0.50	0.18	0.02	0.47	0.09
State Potential Emissions											0.03	0.71	**0.13**

Methodology

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential to Emit VOC (pounds/hour) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential to Emit VOC (pounds/day) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential to Emit VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

PARTICULATE POTENTIAL TO EMIT BEFORE CONTROLS

	*Maximum Throughput Rate (lbs/hr)	**PM/PM_{10} PTE before controls
PM/PM_{10} from HL-1	2.45	10.7
PM/PM_{10} from HL-2	4.90	21.5

*Maximum throughput rate is based on the registration 127-11623-00072 issued January 12, 2002 where PM emissions were prorated from 38.7 parts/hr to 60 parts/hr for HL-1 based on test data.
**Assume all PM emissions are PM_{10}.

Methodology

Potential To Emit Particulate Matter (tons/year) = Maximum Usage (lbs/hour) x 8760 hrs/year x 1 ton/2000 lbs

Appendix A: Emission Calculations
VOC from Miscell Products

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Permit Reviewer: ERG/SD
Date: 8-Jan-03

Material	Density (Lb/Gal)	Max Usage Rate (gal/hr)	Weight % Solids	Weight % VOC	Weight % Hexane	Weight % Toulene	Weight % Acetaldehyde	Weight % Methanol	VOC Emissions (ton/yr)	Hexane Emissions (ton/yr)	Toulene Emissons (ton/yr)	Acetaldehyde Emissions (ton/yr)	Particulate Potential (ton/yr)	Transfer Efficiency
3-M Scotch-Grip IND Black ADH	6.8	0.114	24.0%	60.3%	14.0%	4.68%			2.06	0.48	0.16	0.0	0.49	40%
**Slautterback Strip N-Clean # 9	7.5	0.125	0.0%	5.0%					0.21	0.00	0.000	0.000	0.0	0%
SD20 Cleaner	8.4	0.046	1.0%	17.27%					0.29	0.00	0.000	0.000	0.010	40%
Shaw 440 WA Water Based Mold Release	8.3	8.900	10.0%	0%					0.00	0.00	0.000	0.000	19.48	40%
Shaw 391 WA Water Based Mold Release	8.3	0.199	10.0%	0%					0.00	0.00	0.000	0.000	0.44	40%
L-239W	8.3	0.199	10.0%	0%					0.00	0.00	0.000	0.000	0.44	40%
Dow 36 Water Based Mold Release	8.3	0.133	50.0%	0.8%			0.999%		0.04	0.00	0.000	0.048	1.46	40%
Adhesive Line Cleaner	7.5	0.125	0.0%	100.0%					0.21	0.00	0.000	0.000	0.00	0%
General Purpose Adhesive	6.7	0.036	10.0%	80.0%	30.0%				0.84	0.32	0.000	0.000	0.06	40%

*Material applied using airless spray guns and air atomization spray guns
** 95% of Slautterback Strip N-Clean is recycled

Total State Potential Emissions **3.64** **0.79** **0.16** **0.05** **22.37**

Combined Total HAPs < 25 TPY
Individual HAP = < 10 TPY

Methodology

Potential to Emit VOC (tons/yr) = Density (lb/gal) * Max Usage (gal/hour) * Weight % VOC * 8760 hours/yr * 1 ton/2000 lbs
Potential to Emit HAPS (tons/yr) = Density (lb/gal) * Max Usage (gal/hour) * Weight % HAP * 8760 hours/yr * 1 ton/2000 lbs
Potential to Emit PM/PM10 (tons/year) = Density (lb/gal) * Max Usage (gal/hour) * Weight % Solids * 8760 hours/yr * 1ton/2000lbs * (1-Transfer Efficiency %)

Appendix A: Emission Calculations
VOC from Parts Washer

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Permit Reviewer: ERG/SD
Date: 8-Jan-03

Material	Usage (gal/day)	VOC Content (lb/gal)	Volatile Componet (%)	Flash Off (%)	Potential VOC (tons/yr)
Parts Washer	1.00	6.54	100%	100%	**1.19**

Methodology

Potential to Emit VOC (tons/year) = Usage (gal/day) * VOC Content (lb/gal) * Volatile Component (%) * Flash Off (%) * 365 days/yr * 1 ton/2000 lbs

Company Name: UGN, Inc.
Address City IN Zip:
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

Material	Maximum Throughput Rate (tons/hr)	Emission Factor* (lbs/ton)	PTE Before Controls (tons/yr)
**ISO (MDI)	0.23841	0.0033	0.0034
Polyol	0.51734	0.0033	0.0075
Barrier	5.48503	0.0033	0.0793

State Potential Emissions **0.09**

* Emission factor of 0.0033 lbs VOC/ton polyurethane foam from CP 127-6314 issued on September 5, 1996.
** Assume all VOC emissions are MDI.

Methodology

Potential to Emit VOC (tons/year) = Maximum Throughput Rate (tons/hour) x Emission Factor (lbs/ton) x 1 ton/2000 lbs x 8760 hours/year

Appendix A: Emission Calculations
VOC emissions from 3 Cold Tank Cleaners - 20, 30 and 85 gallon tanks

Company Name: UGN, Inc.
Address City IN Zip: 2252 Industrial Drive, Valparaiso, IN 46383
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

Material	Density (lb/gal)	Usage Rate (gal/day)	Volatile Component (%)	Potential VOC (lbs/hr)	Potential VOC (tons/yr)
Crystal Clean	6.54	2.0	100%	4774	2.39

State Potential Emissions **2.39**

METHODOLOGY

Potential to Emit VOC (tons/year) = Density (lb/gal) * Usage Rate (gal/day) * Volatile Component (%) * 365 day/year * 1 ton/2000 lb

Summary

Company Name: UGN, Inc.
Address City IN Zip:
MSOP: 127-16516
Plt ID: 127-00072
Reviewer: ERG/SD
Date: 8-Jan-03

POTENTIAL TO EMIT BEFORE CONTROLS

Source	PM	PM_{10}	SO_2	NO_x	VOC	CO	MDI
Roof Air Makeup Units	0.90	0.90	0.07	11.78	0.65	9.90	
Space Heaters, Water Heaters,	0.121	0.121	0.01	1.595	0.088	1.340	
Mud Guard	2.1	2.1			0.19		
Headliners Spray Booths (HL-1)	10.7	10.7			0.06		0.0075
Headliners Spray Booths(HL-2)	21.5	21.5			0.12		0.015
Miscell Products Usage	22.37	22.37			3.64		
Parts Washer					1.19		
Mold Cells					0.09		0.0034
Three (3) Cold Tank Cleaners					2.39		
SUM	57.64	57.64	0.08	13.38	8.41	11.24	0.026